=> d his

(FILE 'HOME' ENTERED AT 10:14:42 ON 10 DEC 2007)
FILE 'CA' ENTERED AT 10:14:50 ON 10 DEC 2007
L1 156 S GALVANODYN? OR GALVANOKINET?
L2 31 S L1 AND GALVANOSTAT?
L3 1 S L1 AND RAMAN
L4 6 S L1 AND AUTOMAT?
L5 36 S L2-4

=> d bib,ab l5 1-36

L5 ANSWER 4 OF 36 CA COPYRIGHT 2007 ACS on STN
AN 134:31175 CA
TI Effect of chemical additives on the performance of Na/NiCl2 cells
AU Prakash, J.; Redey, L.; Vissers, D. R.
CS Center for Electrochemical Science and Engineering and the Department of Chemical and Environmental Engineering, Illinois Institute of Technology, Chicago, IL, 60616, USA
SO Ionics (2000), 6(3 & 4), 210-217
AB The effect of chem. additives on the performance of sodium/nickel chloride cells was investigated in quasi-sealed lab. research cells. The performance of these cells was measured by **galvanostatic** and **galvanodynamic** methods. It was obsd. that the use of sodium bromide, sulfur, sodium iodide, and a combination of these additives enhance the performance of the Na/NiCl2 cells by reducing the area-specific impedance of the nickel chloride electrode. Improved morphol. by the use of the poreformer further improves the nickel utilization and the electrode impedance. The performance enhancement is attributed to the chem. and morphol. modifications of the nickel chloride electrode in the Na/NiCl2 cells.

L5 ANSWER 6 OF 36 CA COPYRIGHT 2007 ACS on STN
AN 131:339409 CA
TI Reaction kinetics and X-ray absorption spectroscopy studies of Yttrium-containing metal hydride electrodes
AU Ticianelli, E. A.; Mukerjee, S.; McBreen, J.; Adzic, G. D.; Johnson, J. R.; Reilly, J. J.
CS Department of Applied Science, Brookhaven National Laboratory, Upton, NY, 11973, USA
SO Journal of the Electrochemical Society (1999), 146(10), 3582-3590
AB This is a study of electrode degrdn. mechanisms and reaction kinetics of LaNi4.7Sn0.3, La(1-x)YxNi4.7Sn0.3 (x = 0.1, 0.2, and 0.3) and La0.7Y0.3Ni4.6Sn0.3Co0.1 metal hydride electrodes. Alloy characterization included X-ray diffraction, X-ray absorption (XAS), hydrogen absorption in a Sieverts app., and electrochem. cycling of alloy electrodes. The at. vol. of H was detd. for two of the alloys. Electrochem. kinetic measurements were made using steady-state **galvanostatic** measurements, **galvanodynamic** sweep, and electrochem. impedance techniques. XAS was used to examine the degree of corrosion of the alloys with cycling. Alloying with Y decreased the corrosion rate. The results are consistent with corrosion inhibition by a Y-contg. passive film. The increase in the exchange c.d. of the hydrogen oxidn. reaction with increasing depth of discharge was much greater on

the Y-contg. alloys. This may be due to the dehydriding of the catalytic species on the surface of the metal hydride particles.

=> log y
STN INTERNATIONAL LOGOFF AT 10:22:02 ON 10 DEC 2007